

# INFORMATION TECHNOLOGY

*This section considers the future of information technology, the role wireless telecommunications may play, and strategies for meeting the challenges information technology presents the community.*

## THE FUTURE OF INFORMATION TECHNOLOGY

Information technology is subject to rapid and dramatic change. The nature of the industry continues to push the limits of the technology. Advances in the delivery of digital information and how it's used are occurring at greater and greater frequency.

An example of one trend in the information technology field is dubbed “convergence.” This occurs when various technologies are joined to create new, integrated products and services. Examples include joint GPS (Global Positioning System) receivers and data ports in automobiles to aid drivers in finding the quickest route across town; technology in cellular telephones that allow remote access to the Internet; electronic data service networks using the Internet, cable/fiber optics, and television to inform citizens of potential emergency situations in their neighborhoods; and “smart cards” providing alternative ways for retailers to serve their customers.

Another way information technology will likely reshape the future is where and how people work. The concept of “telecommuting” portends a city where people will be able to work from most any site – including their own home. Information will become the primary product. This product can be “manufactured” at sites other than traditional factories and offices. Telecommuting could thus alter when, where, and how people move about the community and go about their daily lives.

In short, information technology will shape new patterns for how the community works, travels, plays, shops, and communicates. The challenge is to anticipate and adapt this evolving infrastructure in a beneficial way – a way that supports the future described in the Comprehensive Plan's Vision.

## WIRELESS TELECOMMUNICATIONS

Wireless telecommunication is part of a global information revolution. The need for additional infrastructure to support wireless facilities is expected to increase in response to rising consumer demand and new applications. This includes the growth in E-commerce and E-government, and the trend toward technology convergence. The City and County understand the importance of these technologies to the world of tomorrow and support the development of the infrastructure needed to further their use. Management of these facilities should provide flexibility and responsiveness that recognize the rapidly changing and highly competitive nature of the industry. Similarly, the placement and construction of such facilities needs to occur in a way that is compatible with the natural and built environment.

Taller, more intensive facilities should be located in commercial and industrial areas. Facilities in residential areas should be unobtrusive, of a scale consistent with the neighborhood setting, and sited in a way that does not detract from the enjoyment of the neighborhood by its residents.

## STRATEGIES

- ◆ Support efforts to maintain, expand, and upgrade the community's information technology infrastructure.
- ◆ Explore efforts to increase access to information technology for all members of Lincoln and Lancaster County, especially within minority, low income, disabled, rural, and aging communities.
- ◆ Further the cooperation between the City and County and local universities and colleges in applying information technology throughout the community. This can include ways to utilize the University of Nebraska Technology Park to further access to information technology.
- ◆ Encourage the underground placement of existing wired facilities, thus supporting a more reliable information technology infrastructure.
- ◆ Continue to investigate means for enhancing the design and siting of wireless telecommunication support facilities in residential neighborhoods, as well as commercial and industrial districts.
- ◆ Promote regional cooperation in the formation of information technologies alliances.
- ◆ Endorse the on-going cooperation of City, County, and State governments to integrate information technology in the delivery of their services to the community.
- ◆ Investigate means for expanding the maintenance, development, and application of Geographic Information Systems data among public and private sector users.
- ◆ Consider ways to maximize use of the public rights-of-way and public easements that support multiple applications including infrastructure technology facilities. This can include consideration of right-of-way management for utility separation, coordination of work in the ROW, and compensation for usage.
- ◆ Seek broader use of local cable operations to promote information technology services.
- ◆ The City and County will work with government entities to facilitate access to broadband services including high speed internet, television, interactive television and similar future services. Ensuring the safety of citizens and property within the County and its incorporated area requires access to reliable and high quality wireless voice and data telecommunications. Techniques including, but not limited to, franchise and preferred service contracts, should be explored. The City and County will work with legally mandated state and federal agencies in order to achieve these goals.